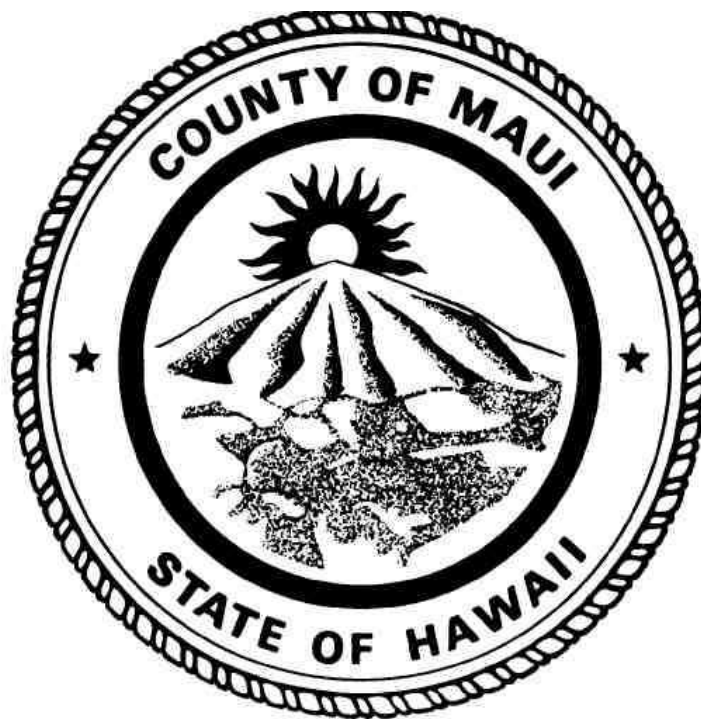


Proposed Budget • Fiscal Year 2007

DEPARTMENT OF
**Public Works &
Environmental Management**



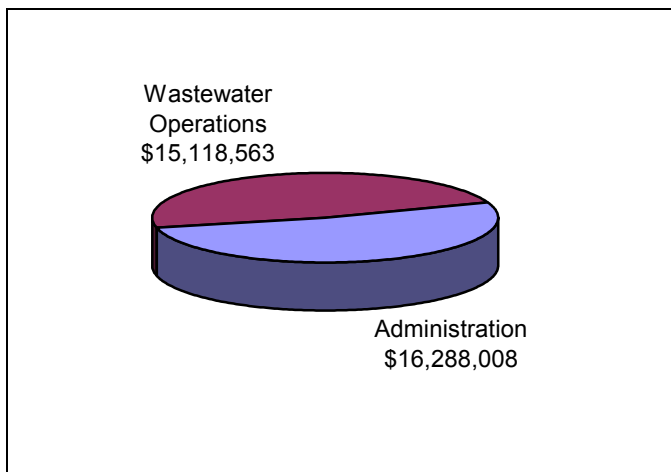
DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL MANAGEMENT

Wastewater Division Summary

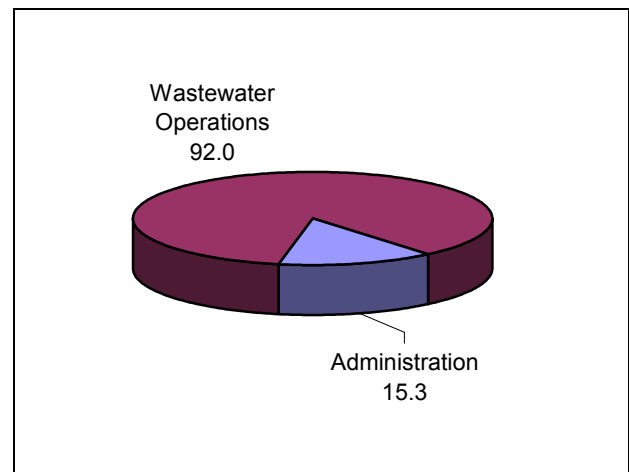
Financial Summary

	FY 2004 Actual	FY 2005 Actual	FY 2006 Budgeted	FY 2007 Request	Change Amount	% Change
Program Summary						
Wastewater Fund						
Administration & Engineering	13,295,269	13,919,451	15,266,107	16,288,008	1,021,901	6.7%
Wastewater Operations	10,717,240	11,126,225	13,671,911	15,118,563	1,446,652	10.6%
Subtotal	24,012,509	25,045,676	28,938,018	31,406,571	2,468,553	8.5%
Total	24,012,509	25,045,676	28,938,018	31,406,571	2,468,553	8.5%

FY 2007 Budget by Program



FY 2007 Budgeted Personnel Summary



Equivalent Personnel Position Summary

	FY 2004 Actual	FY 2005 Actual	FY 2006 Budgeted	FY 2007 Request	Change Amount	% Change
Wastewater Fund						
Administration & Engineering	15.3	15.3	15.3	15.3	0.0	0.0%
Wastewater Operations	91.0	92.0	92.0	92.0	0.0	0.0%
Subtotal	106.3	107.3	107.3	107.3	0.0	0.0%
Total	106.3	107.3	107.3	107.3	0.0	0.0%

Equivalent Personnel (E/P) = Full-time equivalents of full- and part-time personnel.

DEPARTMENT OF PUBLIC WORKS & ENVIRONMENTAL MANAGEMENT

Wastewater Administration Program

Program Description

The Wastewater Reclamation Division is composed of two major organizational elements, Administration and Operations. These two elements work in unison with overlapping responsibilities but shared objectives. Wastewater Administration is responsible for managing the overall objectives of the division, expenditures and revenues and administering the wastewater user charge and cesspool pumping system. It monitors compliance with County, State and Federal regulations regarding treatment, quality and discharges; provides permitting, monitoring and enforcement support for regulated discharges from commercial and industrial users; issues grease interceptors and hauler discharge permits; and maintains the county-wide KIVA database relating to these permits. The program also identifies, plans and constructs wastewater and recycled water infrastructure to support community plans.

Goals

- Ensure that the administrative needs of the department are addressed in such a manner as to enable the operations to continue efficiently and effectively

Objectives for Fiscal Year 2007

- Continuing infrastructure condition investigations and replacements for system reliability and Environmental Protection Agency (EPA) Consent Decree compliance
- Permit all commercial kitchens and inspect all commercial kitchens on an annual basis
- Conduct public presentations and provide customer service and technical training, as appropriate

Performance Measures

	FY05 Actual	FY06 Projection	FY07 Projection
▪ Total wastewater processed (gallons)	5,418,986,000	5,810,000,000	5,800,000,000
▪ Total gallons reused	1,045,618,000	1,250,000,000	1,250,000,000
▪ Percentage of wastewater reused	22%	19%	22%
▪ Number of pretreatment inspections	666	550	600
▪ Percentage of pretreatment inspections conducted	126%	100%	100%
▪ Number of grease related spills	1	4	4
▪ Public presentations	69	65	65
▪ Public contacts	2,213	2,600	2,000
▪ Number of planning and building permits reviewed	1,475	1,300	1,400
▪ Percentage of presentations conducted	106%	100%	100%
▪ Percentage of contacts	79%	100%	100%
▪ Percentage of permits reviewed within 45 days	88%	100%	90%

DEPARTMENT OF PUBLIC WORKS & ENVIRONMENTAL MANAGEMENT

Wastewater Administration Program

Accomplishments for Calendar Year 2005

- **Recycled Water Program**

In the South Maui region, construction was completed on the second phase of an expansion of the County's 12" R-1 water line along Liloa Drive. This new section of pipe connects the existing distribution system to a dry line previously installed along Waipulani Road. The completion of this construction allows for irrigation of the landscaping along the new Kihei Bikeway, as well as making water available for use at condominium properties along South Kihei Road

Also completed was a study done in conjunction with the County of Maui Department of Water Supply which evaluated the feasibility of extending the R-1 recycled water distribution system to north Kihei to displace the use of potable water for irrigation. The results of this study will be used for future planning in the area

In the West Maui region, the master plan completed last year is being evaluated in combination with the development plans and projections of the area in order to provide financially responsible service to this growing community

- **Pretreatment Program**

The Consent Decree required grease interceptor retrofit program began to wind down this year as contractors completed a backlog of installations and fines for non-compliance were issued to businesses and paid. In addition to these upgrades, the County continues to review, approve and inspect new business proposals and construction and began assisting the State Department of Health by reviewing grease interceptor installations in non-sewered areas

Staff began to issue new grease interceptor permits to dischargers this year in a programmed sequence that will better coincide with annual inspections and allow the system to be more automated. Further, all haulers were issued new permits and increased monitoring of these operators has been initiated

- **Planning, Design, and Construction**

Studies: There were two studies completed during the last year which resulted in the scheduling of new CIP replacement or rehabilitation projects for the upcoming years. These studies were:

1. Island-Wide Force Main Assessment Program, Phase III
2. Island of Maui Wastewater System Condition Assessment Phase II, Part I

There are six studies in progress or about to commence that range in scope from evaluating existing infrastructure to the long range planning for wastewater processing in a service area. The projects are:

1. Lahaina WWRF Modifications, Stage 1a Study
2. Central Maui WWRF Study
3. Island of Maui Wastewater System Hydraulic Model
4. Island of Maui Wastewater System Condition Assessment Phase II, Part 2
5. Central Operations and Maintenance Facilities
6. Countywide Pump Station Evaluations

DEPARTMENT OF PUBLIC WORKS & ENVIRONMENTAL MANAGEMENT

Wastewater Administration Program

Accomplishments for Calendar Year 2005 (Continued)

Design: There are nine active design projects ranging in complexity from gravity system rehabilitation to pump station and treatment plant modifications. These projects are:

1. Lahaina WWPS #4 Modifications
2. Kaunakakai WWPS Force Main Replacement
3. Wailuku WWPS Force Main Replacement
4. Front Street Sewer Rehabilitation
5. Lahaina WWPS #1 Replacement
6. Lahaina WWRF Modifications, Stage 1a
7. Kaanapali/Hyatt Force Main Replacement
8. Wailuku/Kahului WWRF Electrical Solids Upgrade
9. Countywide EPA Consent Decree WWRF Renovations

Construction: There were two projects that were completed which enhanced reliability and met expansion goals during the last year. They were:

1. Waiale Road Gravity Wastewater Line Replacement
2. Kihei Bikeway and Reclaimed Water Line

There are three (3) projects currently in the construction phase, and include:

1. Nihoa Street Gravity Wastewater Line Replacement
2. Kahului WWPS Modifications
3. Lahaina WWPS #5 and #6 Force Main Replacement

Major Fiscal Year 2007 Budget Items

- Salaries and wages in the amount of \$921,238
- Operational expenses for the office space rentals at One Main Plaza in the amount of \$210,000, computer services in the amount of \$466,089, fringe benefits in the amount of \$1,898,318, overhead charges in the amount of \$1,547,463, and debt service in the amount of \$11,041,100

DEPARTMENT OF PUBLIC WORKS & ENVIRONMENTAL MANAGEMENT

Wastewater Administration Program

Expenditure Summary

	FY 2004 Actual	FY 2005 Actual	FY 2006 Budget	FY 2007 Request	Change Amount	% Change
Wastewater Fund						
Salaries and Wages	714,748	685,934	851,348	921,238	69,890	8.2%
Operations	476,658	464,625	574,650	876,089	301,439	52.5%
Operations Special Cost*	12,085,340	12,738,920	13,812,109	14,486,881	674,772	4.9%
Equipment	18,523	29,972	28,000	3,800	-24,200	-86.4%
Program Total	13,295,269	13,919,451	15,266,107	16,288,008	1,021,901	6.7%
Equivalent Personnel						
Wastewater Fund	15.3	15.3	15.3	15.3	0.0	0.0%

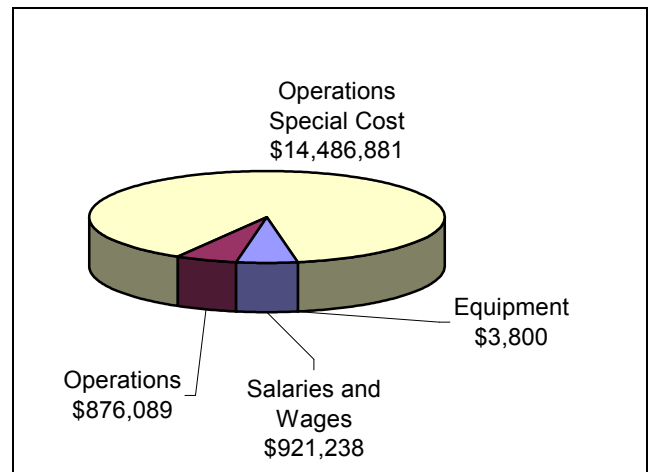
Equivalent Personnel (E/P) = Full-time equivalents of full- and part-time personnel.

*Operations Special Cost: Contributions to General Fund for ERS, FICA, Health Fund, Debt Service and Administrative Overhead Charge

Personnel Position Summary

Position Title	FY 2007	
	Permanent	LTA
Accountant III	1.0	
Civil Engineer III	3.0	
Civil Engineer V	2.0	
Civil Engineer VI	1.0	
Clerk Typist III	1.0	
College Intern	0.3	
Secretary II	1.0	
Wastewater Pretreatment Coordinator	1.0	
Construction Inspector II	1.0	
Wastewater Source Control Technician	1.0	
Wastewater Reclamation Coordinator	1.0	
Wastewater Operations Training Officer	1.0	
Wastewater Reclamation Division Chief	1.0	
TOTAL	15.3	0.0

FY 2007 Budget by Expenditure



DEPARTMENT OF PUBLIC WORKS & ENVIRONMENTAL MANAGEMENT

Wastewater Operations Program

Program Description

Wastewater Operations is responsible for the management, operation and repair of County wastewater collection, transportation and processing infrastructure and related facilities. Activities include process control, safety and training, solids management, production of high quality effluent for recycling, regulatory reporting and compliance, laboratory analysis, preventive maintenance and efficient operation.

Goals

- Assure that the County operates its wastewater collection system and treatment plants efficiently and effectively

Objectives for Fiscal Year 2007

- Maintain and operate all facilities and collection system transmission lines to meet or exceed all regulatory rules and regulations

Performance Measures

	FY05 Actual	FY06 Projection	FY07 Projection
▪ Total wastewater processed (gallons)	5,418,986,000	5,810,000,000	5,800,000,000
▪ Cost/1,000 gallons collected, transported, and processed	\$2.61	\$2.42	\$2.61
▪ KWH/1,000 gallons processed	3.83	3.82	3.83
▪ Feet of waste waterline inspected	296,011	211,200	211,200
▪ Feet of waste waterline cleaned/flushed	274,915	316,800	316,800
▪ Number of compliance days (collection system)	357	356	357
▪ Number of compliance days (plants)	364	356	364
▪ Number of R-1 compliance days	365	365	365
▪ Percentage of waste waterline inspected	140%	100%	100%
▪ Percentage of waste waterline flushed/cleaned	87%	100%	100%
▪ Percentage of compliance days (collection system)	98%	100%	100%
▪ Percentage of compliance days (plants)	100%	100%	100%
▪ Percentage of R-1 compliance days	100%	100%	100%

DEPARTMENT OF PUBLIC WORKS & ENVIRONMENTAL MANAGEMENT

Wastewater Operations Program

Accomplishments for Calendar Year 2005

CENTRAL OPERATIONS ADMINISTRATION, ENGINEERING, and MAINTENANCE

- OP 10 System implemented, division wide, and accessible on network
- RMP (Risk Management Plan) submitted and approved by the EPA

CENTRAL MECHANICS

- Rebuilt two 10" Godwin pumps, one 12" Godwin pump for emergency by passes
- Rebuilt trailer and re-furbished 200 KW Gen Set
- Refurbished 75 kW Gen Set generator from a pump station. Now trailer mounted

CENTRAL LABORATORY

- Developed lab presentation for HWEA 2005 conference featuring the County of Maui Central Wastewater Laboratory
- Initiated daily fecal coli form testing for R-2 water at the Wailuku/Kahului Wastewater Reclamation Facility

COLLECTION SYSTEMS

- Removed 429 tons of grease from pump station wet well cleaning
- Inspected 10,223 manholes

KIHEI WWRF

- In-plant potable water pump station renovation completed
- Main control building MCC renovation completed
- New centrifuge rotating assembly installed
- New control panel, process center, switches, sensors and relays installed
- UV system rehabilitation completed
- Sand filter cleaning and new sand installed on four (4) cells
- Two new flow meters installed throughout plant
- PS #8 Ultrasonic Unit installation completed
- Nine VFD's installed

KAHULUI WWRF

- Chlorine Scrubber refurbishment completed. Refurbish both digesters, replaced diffusers, repaired air pipe leaks
- Replace two Digester sludge transfer pumps
- Septic Receiving Station repairs completed, pump replaced, well cleaned
- Kaa Pump Station – replaced all suction valves
- New Toshiba VFD Controllers installed for centrifuge feed pumps

DEPARTMENT OF PUBLIC WORKS & ENVIRONMENTAL MANAGEMENT

Wastewater Operations Program

Accomplishments for Calendar Year 2005 (Continued)

- Waste oil organized, labeled, and placed on containment pans
- Sludge holding tank bubbler systems replaced
- Old blower building blower pads demolished and filled with cement, leveling floor
- Kuau #2 new Gate fabricated and installed
- Changed out Lahaina PS 2 #1 and #3 pump motor, PS 1 #1 pump motor, Hyatt #3 pump, Lahaina 2 #1 pump motor
- Rebuilt/installed '85 #2 RAS pump
- Rebuilt '75 filter feed pump
- Replaced #5 clarifier drive motor, grit drive motor
- Installed new emergency generator and transfer switch at Lahaina 4
- Replaced auger and trough at #1 conveyor; replaced #1 centrifuge backdrive motor
- Replaced '85 #4 RAS discharge and check valves
- Installed '75 filter feed after rebuild
- Completed drive replacement of #3 clarifier
- Replaced Voith coupling #3 centrifuge
- Replaced Blower Building Transformer USS 3

KAUNAKAKAI WWRF

- Sand filters overhauled
- Replaced Injection Well #1 flow meter

Major Fiscal Year 2007 Budget Items

- Salaries and wages in the amount of \$4,223,255
- Operational expenses for the sludge disposal in the amount of \$1,320,000; Wastewater Operations Administration – gasoline, diesel, oil, etc. in the amount of \$39,000 and professional services in the amount of \$30,000; Central Laboratory – miscellaneous supplies in the amount of \$12,000; Collection Systems – construction materials in the amount of \$10,000, gasoline, diesel, oil, etc. in the amount of \$15,600, rentals in the amount of \$50,000, and repair and maintenance services/contracts in the amount of \$40,000; Wailuku/Kahului Wastewater Treatment Plant (WTP) – gasoline, diesel, oil, etc. in the amount of \$39,000 and electricity in the amount of \$1,351,250; Lahaina WTP – repair and maintenance supplies in the amount of \$250,000 and electricity in the amount of \$2,024,000; Kihei WTP – gasoline, diesel, oil, etc. in the amount of \$24,700, water in the amount of \$56,000, and electricity in the amount of \$2,035,500; Molokai WTP – electricity in the amount of \$97,750 and water in the amount of \$16,800; and Lanai WTP – electricity in the amount of \$5,750
- Equipment purchase of replacement vehicles in the amount of \$155,000 and expansion vehicles in the amount of \$163,000

DEPARTMENT OF PUBLIC WORKS & ENVIRONMENTAL MANAGEMENT

Wastewater Operations Program

Expenditure Summary

	FY 2004	FY 2005	FY 2006	FY 2007	Change	%
	Actual	Actual	Budget	Request	Amount	Change
Wastewater Fund						
Salaries and Wages	3,388,921	3,453,938	3,813,663	4,223,255	409,592	10.7%
Operations	6,930,180	7,243,826	9,494,048	10,476,708	982,660	10.4%
Equipment	398,139	428,461	364,200	418,600	54,400	14.9%
Program Total	10,717,240	11,126,225	13,671,911	15,118,563	1,446,652	10.6%
Equivalent Personnel						
Wastewater Fund	91.0	92.0	92.0	92.0	0.0	0.0%

Equivalent Personnel (E/P) = Full-time equivalents of full- and part-time personnel.

Personnel Position Summary

Position Title	FY 2007	
	Permanent	LTA
Administrative Service Assistant II	1.0	
Assistant WWTP Oper. & Maint. Sup. IV	3.0	
Assistant WWTP Operator	15.0	
Asst WW Operations Prog. Superintendent	1.0	
Clerk III	2.0	
Clerk Typist III	1.0	
Electrician Helper	1.0	
Electronic Technician I	3.0	
Equipment Operator III	4.0	
Laboratory Technician I	1.0	
Molokai WW System Oper/Maint Sup III	1.0	
Plant Electrician/Electronic Repairer I	4.0	
Sanitary Chemist	1.0	
Sewer Maintenance Helper	4.0	
Sewer Maintenance Repairer I	5.0	
Sewer Maintenance Repairer II	2.0	
Sewer Maintenance Supervisor II	1.0	
Supervising Sanitary Chemist	1.0	
WW Collection System Superintendent	1.0	
WW Operations Program Superintendent	1.0	
WW Technical Support Engineer	1.0	
WWTP Maintenance Coordinator	1.0	
WWTP Maintenance Mechanic	12.0	
WWTP Maintenance Mechanic Helper	1.0	
WWTP Operations/Maint. Supervisor IV	3.0	
WWTP Operator IV	7.0	
WWTP Operator I	1.0	
WWTP Operator III	1.0	
WWTP Truck Driver	3.0	
WWTP Truck Driver Supervisor	1.0	
WWTP Worker	8.0	
TOTAL	92.0	0.0

FY 2007 Budget by Expenditure

